REMARKS

By this amendment claims 1-10 have been canceled and claims 11-17 have been added. Claims 11-17 are pending. Reconsideration of the application as amended is respectfully requested.

Rejections under 35 USC §102(e) and 35 USC §103(a)

Claims 11-17 are believed to be allowable over the cited references, which fail to teach or suggest a semiconductor device comprising, for example, a dielectric layer having the properties recited in claim 11.

Fang (US 5,994,776) in FIG. 9 and the accompanying text depicts first 12 and second (not separately numbered) conductive lines, dielectric 21e between the first and second conductive lines, and a space 22e in the dielectric 21e. However, dielectric 21e does not "extend directly over the first and second parallel spaced conductive lines" as presently recited in claim 11. The embodiment of FIG. 11 of Fang depicts dielectric 18 over conductive lines 12, but this material is planarized from the top as depicted in FIG. 12 (see column 6 line 6 through column 7 line 23) before formation of openings and even before formation of resist 24 which patterns the openings.

Similarly, Pang (US 6,177,329) depicts in FIG. 11 that no dielectric layer 112 is formed over conductor 122 while the openings 130 are formed between conductor portions 122. Pang discusses the formation of conductor 122 *after* formation of dielectric 112 using a damascene process (see FIGS. 6-8). Thus it does not appear possible for layer 112 to remain over layer 122 as it is not formed over layer 122. Pang also describes the use of a non-damascene process, but Pang removes the dielectric layer from over the conductor *before* forming the gaps (see column 7 lines 21-45) and thus the presence of dielectric which extends "directly over the first and second parallel spaced conductive lines" concurrently with the presence of the opening in the dielectric as described in claim 11 is neither taught nor suggested.

Similar to the damascene process of Pang, Mao (US 6,406,992) forms conductor 114 after forming dielectric 108 using a dual damascene process (see FIGS. 1E and 1F of Mao), and thus layer 108 cannot extend "directly over the first and second parallel spaced conductive lines" (layer 114), as it is never formed over layer 114.

Claim 13 is further allowable over the cited art, which fails to teach or suggest a an "etched second opening in the dielectric layer which extends through a top surface of the dielectric layer and connects with the first opening in the dielectric layer," nor such an opening having a round or oval shape as recited in claim 14, nor a second dielectric layer which "fills the etched second opening and leaves the first opening unfilled."

Claim 16 is further allowable as the cited references fail to teach or suggest adjacent conductive lines wherein the cross section described depicts "second and third openings therein" with the second and third openings having "an area which is smaller than the first opening and wherein the first opening is interposed between the second and third openings." In addition to not teaching or suggesting three cross sectional openings of claim 16, the cited references fail to recite the relational dimensions of the openings as recited in claim 17. Thus all of claims 11-17 are allowable over the cited references.

Conclusion

Claims 11-17 are allowable over the cited references as applied to the now-canceled claims by the Examiner. If there are matters which may be clarified or resolved through a telephone conversation, the Examiner is cordially invited to contact the undersigned. This is believed to be a complete response to the Examiner's office action.

Respectfully submitted,

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